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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,600	10/06/2003	Jorge Carlos Joaquin Romagnoli	J641-002 US	5924

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NOTARO AND MICHALOS
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ORANGEBURG, NY 10962-2100

EXAMINER

BATSON, VICTOR D

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 01/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/679,600

Applicant(s)

JOAQUIN ROMAGNOLI, JORGE CARLOS

Examiner

Victor Batson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 lines 5-6, "the furrow-opener disk" lacks proper antecedent basis. Similarly, in claims 2-4, "the furrow-opener disk" lacks proper antecedent basis. In claim 3, the clause "wherein the soil pushed aside by the furrow-opener disk is considered in a substantially uncompressed state" is considered vague and indefinite and does not appear to be further limiting to the leveling wheel. The limitations regarding the depression dimensioned being related to the cross-section of the soil pushed by the furrow-opener disk is considered vague and indefinite since a specific cross-section of the pushed soil has not been established, and would vary depending on the type of soil the device is used with. In claim 6 "said the profile" is not understood. In claim 6 line 4, "the maximum depth" lacks proper antecedent basis. In claim 6 line 5, the phrase "of such depression or alveolus" is unclear. In claim 7, "said profile", "the treading surface" and "the maximum depth" lack proper antecedent basis. In claim 9 lines 2-3, "the depressed side area" and "the surface of the treading band" lacks proper antecedent basis. In claim 10, the phrase "is sufficiently resilient to avoid wet soil getting stuck thereto" is considered vague and indefinite. In claim 15, the limitations regarding the *face at around 30 percent in relation to the horizontal, the number of studs, and the*

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base of the studs is not understood. In claim 15 lines 6-7, "the cone height" and "the base diameter" lack proper antecedent basis. In claim 16, "the furrow-opener disk", "the furrow-opener", "the open furrow" and "the seed" lack proper antecedent basis.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11,12,14,15 as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by Hangny (6,314,897).

Hangny discloses a covering wheel 36 including a treading band provided with a plurality of ***substantially*** conical studs 46 in a circular array around the treading band.

Claims 11,12,14,15 as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by Bruns et al. (5,896,932).

Bruns et al. discloses a covering wheel 10 including a treading band 11 provided with a plurality of ***substantially*** conical studs 14 in a circular array around the treading band.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4,6,7,10 as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Westerfield (4,374,500) in view of Frase et al., (4,398,478) or Krumholz (3,701,327).

Westerfield discloses leveling wheels 34 & 35, each including a depression (not numbered but shown in figure 3 adjacent discs 18 & 19 respectively), capable of receiving soil pushed aside by the furrow-opener device. Westerfield however is silent as to whether the inner tread of the leveling wheel is adapted to be semipneumatic. Therefore, Westerfield lacks specifying that the wheels are semipneumatic. Frase et al. (col. 4) and Krumholz (col 3) both teach that a semipneumatic inner tread is an equivalent structure known in the agricultural art. Therefore, because these two tread means were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute a wheel with a semipneumatic inner tread as taught by Frase et al., or Krumholz, for the unspecified inner tread of Westerfield.

Claims 8,9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Westerfield (4,374,500) in view of Frase et al., (4,398,478) or Krumholz (3,701,327) as applied to claims 1-3,6,7,10 above, and further in view of Murray (4,712,492). Westerfield as modified by Frase et al. or Krumholz discloses leveling wheels as described previously, but lacks specifying that the wheels include at least one chord.

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Murray discloses the use of chords with an agricultural wheel (figure 2). Chords add strength, rigidity and support to pneumatic tires.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wheels of Westerfield as modified by Frase et al., or Krumholz by using chords as taught by Murray, to provide strength, rigidity and support.

Claim 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Hagny (6,314,897) in view of Westerfield (4,374,500) and Frase et al., (4,398,478).

Hagny discloses a tandem including a covering wheel 36 as described previously, and a leveling wheel 28 having a side area next to a furrow-opener disk 24. The leveling wheel of Hagny however lacks a depression forming an alveolus between the disk and tread. Westerfield teaches that a leveling wheel having a depression forming an alveolus between the disk and tread is an equivalent structure known in the agricultural art (see figure 3). Therefore, because these leveling wheel means were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the wheel of Westerfield for the wheel of Hagny. Concerning the limitation of the leveling wheel being semipneumatic, Frase et al. teaches that it is known in the art for an agricultural wheel to use a tread that is semipneumatic. A semipneumatic tread provides for more cushioning and therefore, smother operation over rough and hard terrain.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the leveling wheel of Hagny as modified by Westerfield,

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by using a semipneumatic tread, to enable smoother operation over rough or hard terrain.

Allowable Subject Matter

Claims 5,13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor Batson whose telephone number is (703) 305-6356. The examiner can normally be reached on Monday through Friday (except Wednesday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Will can be reached on (703) 308-3870. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 13, 2005



Victor Batson
Primary Examiner
Art Unit 3671